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Invention:

Heat Fan

ABSTRACT

An oscillating fan with heated circulating blades consisting of the proper heating element emitting the required objective: Fulfilling the task of inducing higher temperature air control sufficiently into its environment.

2 Claims, 10 Drawing Figures

HEAT FAN

BACKGROUND OF THE INVENTION

Typically electric fans have been used to circulate air flow thus inducing a cooler environment. Other heaters have been used to heat the local environment by forcing air flow through heated elements, warming the air by the heater without the ability to oscillate thus not providing sufficient results. Some electrically heated devices have been used to heat areas by placing a swivel fan in front of the heated element with limited air circulation throughout the area. This submitted invention of heat fan provides cost effectiveness for the populous, a simplified unit with increased capability and could be used in any environment. This oscillating fan with thermostat environmental control with rotating blades embedded with activated heated elements achieves desirable results in any location.

SUMMARY OF THE INVENTION

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Thermostatically environmentally temperature controled this invention rotates the air flow of the surrounding environment. Consistently increasing the temperature of air to reach the desirable requested temperature. Its unique function enables this method through the designing of delivering current to sealed metal ballbearings. Enabling to rotate and deliver electric current to the heating elements at the same time. Ballbearings may be used in several fashions using one ball as being used in a ballpoint pen or several metal balls as customary in all ballbearings. This principle may be adopted to any manufacturing fans with this proposed modified procedure. The advantage of delivering electric current through the metal ballbearings to the heating elements on the rotating embedded blades is the principle basis of this invention. This method is enormous in its simplicity, cost and effectiveness. It should be noted that this invention based on the principle of using any ballbearing sealed wheel or otherwise to act as a electricity conductive supplier to the heating element embedded on the blade thus warming the blade creating hotter air exhaustive. Proper safety measure as required by UL adopted in this mechanism. This fan may be used for all seasons by adjusting the control device deactivating the heating element when not necessary, Thus enabling the fan to be used as a regular fan.

BRIEF DESCRIPTION OF THE DRAWINGS

- Fig. 1 A view of an electric fan as constructed in accordance with the present invention.
- Fig. 2 Illustration of the leading conductors and its assembly
- Fig. 3 A front view of blades heating elements and proposed location
- Fig. 4 Illustrated side view of total current supply to blades
- Fig. 5 Illustrates the rotating center hub with blade mounting locations
- Fig. 6 A view of the mounted blade on center hub showing current conductions
- Fig. 7 Full view of current delivery mechanism means
- Fig. 8 Control panel in accordance with this invention
- Fig. 9 Drawing showing basic air flow
- Fig. 10 Shows electric system

TOTAL DESCRIPTION OF THE EMBODIMENTS

Fig. 1 Heating fan 1 for the circulation of heated air in an environment which fan comprises with panel board 2 for desirable control.

Fig. 2 Shows the housing 6 of a motor contain to electrical supply line 13 going through housing cover 5 attached with insulating collets 10 firmly providing insulation allowing posts 12 to be attached to leading vinyl coated conductors 8 with sealed ballbearing 7 at their tips inserted into posts 12 through collets 10,11 and firmly held in place with the help of tightening collets logs 9 leading inside the center hub 4 resting on a metal track

thus creating a negative and positive electrical flow leading to the heating element embedded into the back of blades 3.

Fig. 3 Shows fan blades 3 with embedded heating elements 20 of ways of assembling 21 standing from the center hub 4 fully assembled the blades to the center will result in a full view of the front fan blade and center 3, hub 4 as shown on figure 2. Figure 3 reveals the back side of the fan blades 3 and the mounting 21. Heating elements ends 23 rests on a conductive spring inserted into the center hub 4 above the metal track in which sealed ballbearing 7 (fig.2) rests on and rotating while supplying electricity. Fan blades 3 made from aluminum and center hub 4 material composed of ceramic compound providing strength and heat insulation.

Fig. 4 Provides a side view of the mechanism created by these parts and assembled for operation. Although vinyl coated posts 8 show different lengths, this figure illustrates the difference of location, or maybe called orbits, for proper supply to heating element to function. In this figure we see the motor housing 6 the front cover 5 aluminum blades 3 heating element 20 sealed ballbearing 7 resting on the inside metal tracks of ceramic center hub 4. In this figure we can understand the way the heating element 20 is supplied, with the help of the ballbearing 7 through contact point 21 with electricity to function.

Fig. 5 Illustrates the center hub 4 made from ceramic compound inserted into the center cavity hub 4 fitted into the revolving motor shaft

Fig. 6 We illustrate the attachment of blades 3 with the embedded heating elements 20 to the heating elements ends 23 to the center hub 4 with the support of conductive springs 23 A Could be clarified through figure 3.

Fig. 7 Illustration reveals the power supply line 13 stemming from the source ending at common jack 12 going through a collet consists of 9, 10 and 11 made of vinyl inserted into conductive posts 17 covered with vinyl insulation 8 and end with a sealed ballbearing 7.

Fig. 8 Provides the illustration of the electrical power structure with the distribution of selection buttons 2 allowing variable options 25, 26, 27, 28, 29 and 30 stemming from main source 31. It continues with a side view of the power line 13 through collets 10, 11 and front motor cover 5 and tightened with vinyl collet log 9. It then continues conductivity into no. 17 as shown in figure 7 with vinyl coated covering 8 for insulation purpose to the metal ballbearing 7 at the end.

Fig. 9 Shows the total air direction and the direction of the revolving blades 3 as they are being mounted on center hub 4 while colder air 40 replaced with hotter air 50.

Fig. 10 Illustrates the conventional method being used with existing fan with addition to f-function needed for supply lines 13 as shown in figure 8.